Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT
Issued under 401 KAR 52:040

Permittee Name:	**KI (USA) Corporation**
Mailing Address:	**501 Mayde Road, Berea, KY 40403**
Source Name:	**Same as above**
Mailing Addres	**Same as above**
Source Location:	**same as above**
Permit ID:	**S-07-069 R1**
Agency Interest #:	**2828**
Activity ID:	**APE20080001**
Review Type:	**Minor Source, Revision**
Source ID:	**21-151-00047**
Regional Office:	**Frankfort Regional Office** **643 Teton Trail, Suite B** **Frankfort, KY 40601** **(502) 564-3358**
County:	**Madison**
Application Complete Date:	**June 3, 2008**
Issuance Date:	**May 18, 2007**
Revision Date:	**August 25, 2008**
Expiration Date:	**May 18, 2017**

John S. Lyons, Director
Division for Air Quality

Revised 05/07/07

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:040, State-origin permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or other federal, state, or local agencies.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Electrodeposition Coating

Description:
The electrodeposition line include pretreatment tanks for cleaning, conversion coating, and rinse, along with the electrodeposition tank, a natural gas fired bake oven, and a natural gas-fired afterburner. The heat source for the pretreatment processes is hot water provided by the facility boilers.

Applicator rated capacity: 6.85 gallons/hour
Electrocoat Bake Oven: 1.6 MMBtu/hr, Natural Gas Fired
Construction date: January 26, 1989

02 (02) Degreasing
Natural Gas Fired Heater, 800,000 Btu/hr
03 (03) Phosphatizing

04 (04) Electrodeposition Process
Tank Dimensions 31.5'x4.3'x5.4'; 2645 Gallons
Coating, Acetic Acid, and Cleanup Solvents

APPLICABLE REGULATIONS:
401 KAR 59:010, New process operations applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

1. **Operating Limitations:** None

2. **Emission Limitations:**
   a. 401 KAR 59:010, § 3(1), Visible emissions from the electrocoating line stacks shall be less than 20 percent opacity.
   Compliance Demonstration Method:
   See 4. Specific Monitoring Requirements and 5. Specific Recordkeeping Requirements

   b. 401 KAR 59:010, § 3(2), Particulate matter emissions the electrocoating line stacks shall not exceed 2.34 pounds per hour.
   Compliance Demonstration Method:
   The source is considered to be in compliance with the emission limitation above based on the coating application method and material usage rates as provided in the permit application.

3. **Testing Requirements:** If deemed necessary, the Cabinet may require testing by using appropriate EPA Methods, at such times as maybe required by the Cabinet in accordance with Regulation 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 4.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a. A qualitative visual observation of the opacity of emissions shall be performed from the electrocoat stack weekly and a log of the observations maintained. If visible emissions from the stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of process equipment for all necessary repairs.

b. See Section B - 5. Specific Recordkeeping Requirements.

5. Specific Recordkeeping Requirements:

a. Records of the amounts of all coatings, additives, and clean-up solvents used per month and the VOC and HAP content of each material shall be maintained. Every (6) months, calculate and record the monthly emission totals and emissions from the proceeding (12) month period. Records kept shall be sufficient such that the permittee is capable of demonstrating compliance with minor source status if requested to do so by the Cabinet. Such records will contain as a minimum;
   (1) Purchase orders or receipts showing the amount of each VOC and HAP containing material used each month.
   (2) MSDS, Manufacturer's Certified Product Data Sheets, or the results of EPA reference test methods from which the VOC and HAP content of each material can be obtained.
   (3) Emission totals and sample calculations.

b. When operating the affected facilities uncontrolled, all VOC and HAP emitted during any specified time period shall be considered to equal the total amount of VOC and HAP purchased and used during that specific time period. Refer to Section C, 6.a.(3).

c. Records of weekly qualitative visual observations shall be maintained. Such records will contain as a minimum;
   (1) The date, time, and identity of the personal making the observation.
   (2) Records of any Method 9 readings taken as a result of seeing visible emissions.
   (3) Records of inspections and repairs made as a result of an exceedance in the opacity limit.

6. Specific Reporting Requirements:

a. See Section C - General Conditions, 3.

b. The permittee will report 12 month VOC and HAP emissions as part of the 6 month reporting required by General Condition, 3.c.

c. When corrective actions are required due to an opacity exceedance as noted in Section B (2) A, the permittee shall submit the following information from the control device inspection and repair log.
   (1) A description of the deviation,
   (2) The date and time period of the deviation, and
   (3) Actions taken to correct the deviation.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements: (continued)

(4) A statement of the cause of each deviation.

Copies of these records shall be submitted as a part of the semiannual reporting as required in Section C (3)(c).

7. Specific Control Equipment Operating Conditions: See Section C – General Conditions, 6.a.(2), of this permit when compliance is demonstrated using Section B - 8. Alternate Operating Scenarios below.

8. Alternate Operating Scenarios:

The source may elect to utilize the following control equipment.

Control Equipment:

Electrocoat Bake Oven Afterburner
Cincinnati Industrial Machine-Model # RAH-80
Fuel Input: Natural Gas Fired, 80,000 Btu/hr
Installation date: May 1989

Alternate Recordkeeping Requirements:

a. If the afterburner is used for control the permittee shall keep all the following records.
   (1) The design and/or manufacturer's specifications.
   (2) The operational procedures and preventive maintenance records.
   (3) Maintain a record of the average combustion chamber temperature limit established during the most recent performance test and all relevant supporting data.
   (4) The combustion chamber temperature shall be recorded continuously along with the 3-hour averages.
   (5) Record all periods (during coating operations), in which the 3-hour average combustion chamber temperature of the afterburner is below the temperature limit established during the most recent performance test. During all periods of operation when the 3-hour average combustion chamber temperature is below the combustion chamber temperature limit established by the most recent performance test, a daily log of the following information shall be kept:
      A. Whether any air emissions were visible from the facilities associated with the thermal oxidizer.
      B. Whether visible emissions were normal for the process.
      C. The cause of the visible emissions.
      D. Corrective action(s) taken shall be recorded.
   (6) If the 3-hour average combustion chamber temperature falls below the operating temperature limit established during the most recent performance test, then the permittee shall assume a destruction efficiency of zero during the time period of the deviation for the purpose of calculating emissions.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

8. Alternate Operating Scenarios: (continued)

Alternate Recordkeeping Requirements: (continued)

b. The permittee shall maintain records to show capture efficiencies remain constant, including the following information:
   (1) For a capture system that is a PTE;
      A. Maintain records of the data and documentation used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent.
      B. Continuously record the direction of air flow, and either the average facial velocity of air through all natural draft openings, or the pressure drop across the enclosure.
      C. Record all periods (during coating operations) during which the direction of airflow is out of the enclosure. Record all periods during which the average facial velocity of air through the natural draft openings is less than 200 feet per minute; or the pressure drop across the enclosure is less than 0.007 inch H2O. For emissions reporting, treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation.
   (2) For a capture system that is not a PTE;
      A. Maintain records of all data and documentation you used to determine capture efficiency.
      B. The capture efficiencies recorded during testing and the values of the average volumetric flow rates or duct static pressures that will be monitored corresponding to those capture efficiencies.
      C. Continuously record the average gas volumetric flow rate or duct static pressure in each duct between a capture device and the thermal oxidizer. Calculate and record the 3-hour average volumetric flow rate or duct static pressure.
      D. Record all 3-hour periods (during coating operations) during which the average gas volumetric flow rate or duct static pressure in each duct between the capture device and the afterburner is less than the volumetric flow rate or duct static pressure limit established for that capture device during the most recent performance test. For emissions reporting, treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation.

c. Records of all times that the afterburner is in operation.

d. Records of control system operating parameters above will be kept in addition to the Specific Recordkeeping Requirements, item 5 above.

Alternate Reporting Requirements:

a. The beginning and end times when the afterburner is used for emissions control.

b. Each instance in excess of 3 hours during which the average temperature of the afterburner remains below the temperature limit established during the most recent performance test.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

8. Alternate Operating Scenarios: (continued)

Alternate Reporting Requirements: (continued)

c. For a PTE, any period during which the direction of airflow is out of the enclosure, during which the facial velocity of air through the natural draft openings is less than 200 feet per minute, or during which the pressure drop across the enclosure is less than 0.007 inch H2O.

d. For an enclosure that is not a PTE, any 3-hour period during which the average gas volumetric flow rate or duct static pressure in each duct between a capture device and the afterburner is less than the volumetric flow rate or duct static pressure limit established for that capture device during the most recent performance test.

e. The semi-annual report shall include items a-d above as appropriate. If no deviations to the control or capture system occurs during a particular 6-month period, the permittee shall state this in the semi-annual report.

f. The permittee will report VOC and HAP emissions semi-annually in accordance with Specific Reporting Requirements, item 6 above, and General Condition 3, in addition to items a-d above as appropriate.

SECTION C - GENERAL CONDITIONS

1. Administrative Requirements

a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.

b. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15]

c. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].

d. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition [Section 1a-4, 5, of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].

e. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].

f. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:040 Section 11(3)].

2. Recordkeeping Requirements

a. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:040 Section 3(1)(f) and Section 1b-IV-2 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].

SECTION C - GENERAL CONDITIONS (CONTINUED)

b. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

3. Reporting Requirements

a. (1) In accordance with the provisions of 401 KAR 50:055, Section 1, the permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   i. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

   (2) The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition a.(1) above), the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report [Section 1b-V-3 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].

b. The permittee shall furnish information requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the permit [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].

c. Summary reports of monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation. The summary reports are due January 30th and July 30th of each year. All deviations from permit requirements shall be clearly identified in the reports. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

4. Inspections

In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency:

SECTION C - GENERAL CONDITIONS (CONTINUED)

a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation.

b. To access and copy any records required by the permit.

c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit.

d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

5. Emergencies/Enforcement Provisions

a. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].

b. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   (1) An emergency occurred and the permittee can identify the cause of the emergency;
   (2) The permitted facility was at the time being properly operated;
   (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

c. Emergency provisions listed in General Condition 5.b are in addition to any emergency or upset provision contained in an applicable requirement [401 KAR 52:040, Section 22(1)].

d. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:040, Section 22(2)].

6. Compliance

a. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:

SECTION C - GENERAL CONDITIONS (CONTINUED)

(1) Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by 401 KAR 50:055, Section 1.
(2) All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and nonroutine maintenance performed on each control device. Daily observations are required during daylight hours of all operations, control equipment and any visible emissions to determine whether conditions appear to be either normal or abnormal. If the operations, controls and/or emissions appear to be abnormal, the permittee must then comply with the requirements of Section C – General Conditions, 3.a.(2), of this permit.
(3) A log of the monthly raw material consumption and monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program, spread sheets, calculations or performance tests as may be specified by the Division [401 KAR 50:055, Section 2].

b. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Regional Office listed on the front of this permit in accordance with the following requirements:
(1) Identification of the term or condition;
(2) Compliance status of each term or condition of the permit;
(3) Whether compliance was continuous or intermittent;
(4) The method used for determining the compliance status for the source, currently and over the reporting period, and
(5) For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
(6) The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality	Division for Air Quality
Frankfort Regional Office	Central Files
643 Teton Trail, Suite B	803 Schenkel Lane
Frankfort, KY 40601	Frankfort, KY 40601-1403

c. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:
(1) Applicable requirements that are included and specifically identified in this permit; or
(2) Non-applicable requirements expressly identified in this permit [401 KAR 52:040, Section 11].

SECTION D - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:040, Section 6. While these activities are designated as insignificant the permittee shall comply with the applicable regulation and any level of periodic monitoring specified below.

	Description	Generally Applicable Regulation
1.	Welding Operations Emission Points 01 and 08	401 KAR 59:010
2.	Natural Gas Fired Boilers (2) Emission Point 06 2.51 MMBTU/hour total	401 KAR 59:015
3.	Natural Gas Heaters for Building (2) Emission Point 07 6.0 MMBTU/hour each	None
4.	Various Small Space Heaters < 1 MMBTU/hour each Natural Gas Fired.	None
5.	(2) Bulk Oil Tanks 1000 gallon & 3000 gallon Vapor Pressure < 1.5 psia	None
6.	Laboratory Fume Hoods	None
7.	Metal Stamping Presses	None
8.	Wastewater Pretreatment System Metal Hydroxide Precipitation	None
9.	Touch-up Spray Painting with aerosol spray cans	401 KAR 59:010